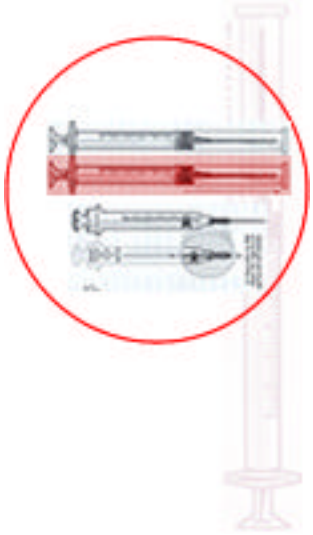
NIOSH recommends that health care facilities use safer medical devices to protect workers from needlestick and other sharps injuries. Since the passage of the Needlestick Safety and Prevention Act in 2000 and the subsequent revision of the OSHA Bloodborne Pathogen Standard, all health care facilities are required to use safer medical devices.

SAFER MEDICAL DEVICE IMPLEMENTATION IN HEALTH CARE FACILITIES

SHARING LESSONS LEARNED

NIOSH has asked a small number of health care facilities to share their experiences on how they implemented safer medical devices in their settings. These facilities have agreed to describe how each step was accomplished, and also to discuss the barriers they encountered and how they were resolved, and most importantly, lessons learned.



Phase 3: Identify and Screen Safer Medical Devices

Our hospital is a not for profit corporation. We have served the community for over ninety years. We offer a full range of general acute care, drug rehabilitation and specialized health services. We are licensed for 170 beds; we have an admission rate of approximately 6,000 patients per year. Our in-patient dialysis unit provides treatment to 4-6 patients daily. Our facility performs approximately 5,000 surgical procedures yearly. We also deliver services via 5 off site clinics. We provide additional services to the community through our comprehensive detoxification unit, chemical dependency unit, and HIV (Wellness Center).

Process the sharps injury protection team used in identifying safer medical devices.

In order to reach our goal of reducing incidents of sharps injuries to our employees we looked at three specific areas.

1. *The product/ device(must have a balance of safety and functionality)*
2. *The approach and attention to the implementation of the device to include: Manufactures/ Sales representatives should provide, face to face training, staff in-services, and supporting materials, such as videos and handouts to be available before the devices are used.*
3. *Method to obtain staff input/ involve staff in the selection process*

After assessing our needlestick pattern for the past two years, we decided that our highest priority would be to evaluate safety needles and angiocatheters. We used the following criteria to assist us in the evaluation phase for the product that would be the most appropriate device for our institution:

1. *Define the unique needs of each specific department*
2. *Passive Verses Active Devices*
3. *Assess various methods of product evaluation*
4. *Identify the cost benefits for each product*
5. *Implementation of educational sources*
6. *Assess methods for compliance monitoring*

Phase 3- Page 2

Where the sharps injury prevention team obtained information about available devices and what this information included.

Before permitting the vendors to come in, we asked our employees for their input on safety devices. This could be a product that was used at another institution, or just a product that they would like for the team to assess. We sent one team representative to Nurse Education Day. (All nurses are required to attend one eight hour Education Day session day per year) Fourteen nurses that attended that day were asked to submit product materials for the team to review. We requested that submissions be in the form of articles or Internet sources. We would also accept the outside wrapper or an unopened sample of the product. Another representative requested information from five new employees at the hospital's Orientation day activities, which is also held monthly. This group consisted of two nurses, two lab technicians, and one environmental employee. We realized that they could be a valuable source of information because most of these employees had worked at other facilities, and some of them had prior, hands on experience with safety engineered devices.

We put together a short employee submission form that was to be attached to the article or sample product:

1. Would you recommend product submitted? Yes_____ No_____
   If Yes, why do you think that this is a good product?
   If No, please list problems encountered.

2. For Internet articles, please list Website, if known.

3. Submit needles and catheters in the original, unopened wrapper.

4. Please provide feedback on products that you have used in the past.

5. Please submit any additional comments

Thank you for helping us to reduce needlesticks at (Institution Name)

We did not ask for names or department identification, we felt that a larger number of responses would be submitted, if no identifiers were requested. Additional copies of the form were distributed to the Wellness clinic (HIV Clinic), and the laboratory department.

Phase 3. Page 3.

List and explain the factors or criteria used in deciding which safer medical devices should be screened for possible pilot testing.

The team members were also asked to gather current information and availability of safety engineered systems for observation at the next meeting. This would include information that was obtained from journals, conventions, meetings, and information about devices that were being used at other healthcare facilities. Various sub-committees were assigned to assess the materials. The following criteria were to be used as our guide to decide which company representatives would be asked to present their products to the team.

- *The safety feature is an integral part of the device and not just an accessory.*
- *It is not easy to skip a crucial step in proper use of the device.*
- *The safety feature does not obstruct the vision of the tip of the sharp.*
- *The product does not cause harm or discomfort to the patient.*
- *The product is easily handled by someone wearing gloves.*
- *The safety feature requires the user's hands to remain behind the needle at all times.*
- *When the safety feature is activated, there is a clear and unmistakable sign (audible or visible).*
- *The device is simple, and the user does not need extensive training for correct operation.*
- *The safety feature operates reliably.*
- *The safety feature does not interfere with the normal use of the product.*

Phase 3. Page 4.

Lessons learned during the process of identifying and screening safer medical devices

More than sixty employee forms were distributed and we received forty-five responses. We were not prepared for the large number of materials that were submitted. Some of the submissions were accompanied by lengthy comments and testimonials. We did not have adequate staff, or the time to read through all of the forms. We should have narrowed down the number of forms that we distributed. The submission form could have been shorter and we should have deleted the request for additional comments at the bottom of the form.

The assessment of two products, IV catheters and syringes, produced a tremendous amount of literature. We should have completed one task (one assessment/evaluation phase) before we started on the other one. It was difficult to divide the information into two separate groups. We had to complete the task of assessing the two groups prior to the presentation phase. We wanted to be sure that we were clear on the features that each product offered before the sales representatives were asked to come in.

Staff hours and Other Costs:

Management	***35 Hours***
Staff	***28 Hours***
Total	***63 Hours***

Materials: Copying Forms, Meeting/minutes and product information